

following manner. Initially, each of the barrier rib materials was fired at its softening point for 10 minutes to yield a sample, and a diamond indenter for use in a Vickers' hardness tester was pressed into the surface of the fired sample. In this procedure, the cracking load was defined as the load at which cracking occurred in a corner of the resulting square indentation.

In the above examples, barrier rib materials using a cristobalite powder are not detailed. However, a cristobalite powder can replace part or all of the α -quartz powder in the barrier rib materials.

Other embodiments and variations will be obvious to those skilled in the art, and this invention is not to be limited to the specific areas stated above.